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SCOUT200 version 21.2 [Dec 2021]

Bently Nevada is pleased to present the v21.2 release of the SCOUT200 S1 Collector App, with new capabilities:
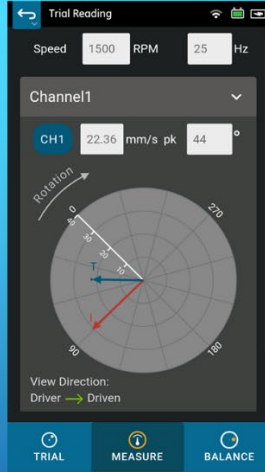

Figure 1-1 What's New in v21.2

Bently Nevada remains focused on delivering the world's premier plantwide machinery management solutions through bi-annual product releases.

Thank you,

Nigel Leigh, *Product Line Manager*   Sonu Jain, *Technical Product Manager*

On behalf of your SCOUT200 Leadership and Development Teams

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V21.2 CAPABILITY OVERVIEW

V21.2 SCOUT200 Overview video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

SCOUT200 v21.2 Capabilities		
Rotor Balancing	The balancing function enables quick diagnosis and correction of rotor imbalance using Initial, Trial and Balance readings	p. 3
Rotor Balancing Kit	Rotor balancing kit includes Laser Tach, mag mount, extension cables, etc.	p. 7
S1 Collector app on Google Play Store	Available to download S1 Collector app from Google Play Store. Also, supported on Android 10 and 11	p. 8
System 1 V21.2 Enhancements for Portables	Several enhancements within the System 1 v21.2 software release will be of particular benefit to portable users, so are also covered here	p. 9

ROTOR BALANCING

With v21.2, SCOUT200 provides the capability to balance machines with a single balance plane. The user interface is designed to step you through the balance process with ease, minimizing the need for balancing training or experience.

To analyze and correct rotating mass imbalance problems, launch the S1 Collector app and select Balance. This launches Balance menu:
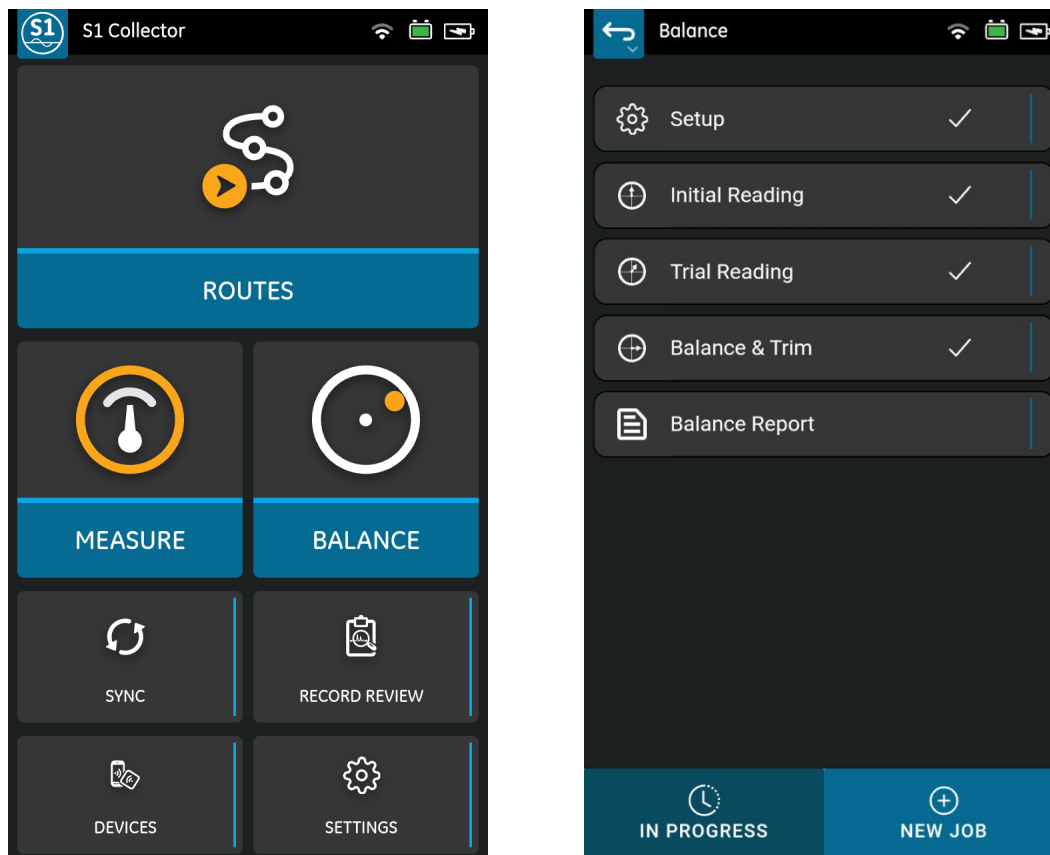

Figure 2-1: Balance button on Home screen, and Balance Menu

Setup Balance parameters like Unit preference, Machine info, Sensors & tach, and Weight Plane information.
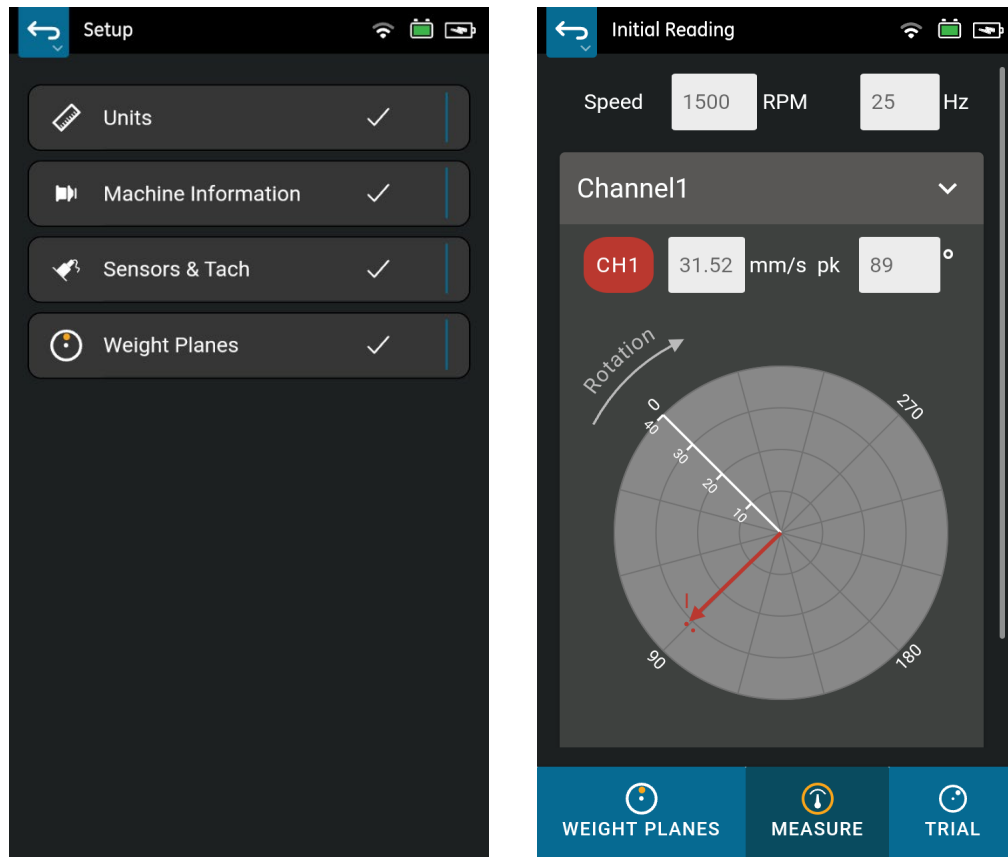**Then take an Initial reading of the rotor's imbalance.**

Figure 2-2 Setup Menu & Initial Reading screen

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Trial Reading - Attach a Trial weight to the balancing plane and take a new measurement. The SCOUT200 calculates the effect of that known weight, thus allowing it to calculate the ideal mass and position of a balance weight to counteract the initial imbalance.

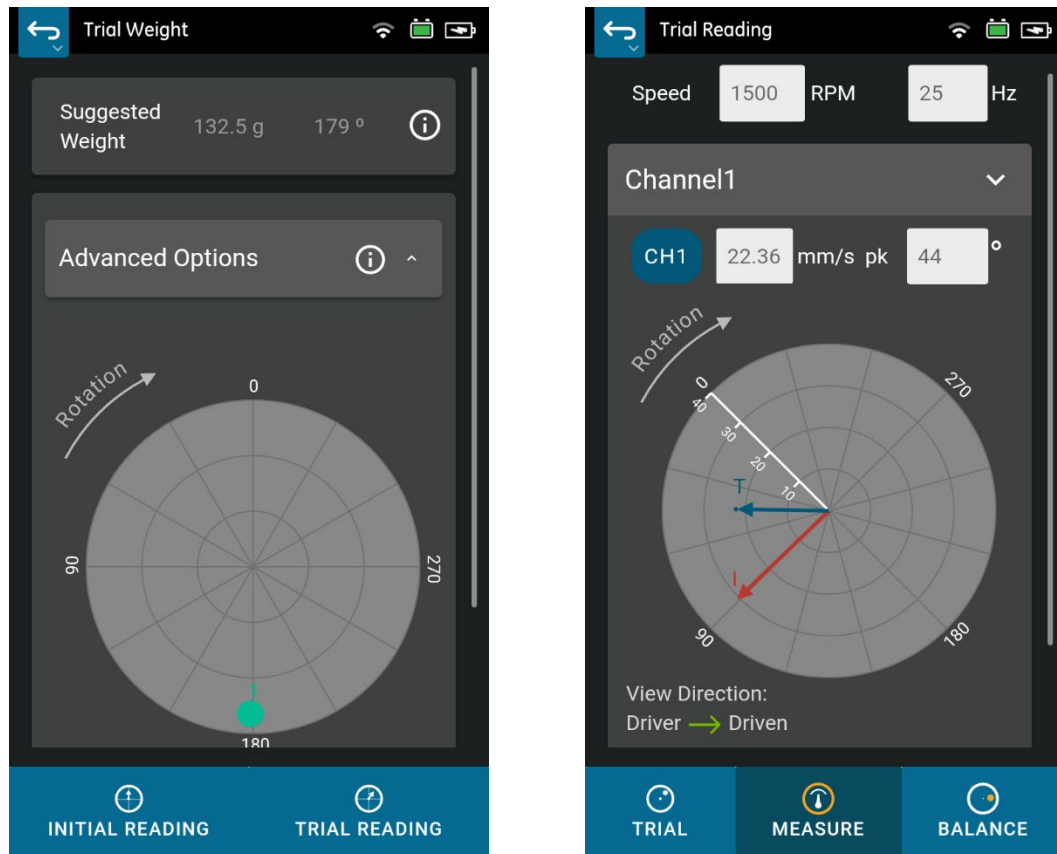Note the info buttons throughout the app, to explain the many parameters and options.
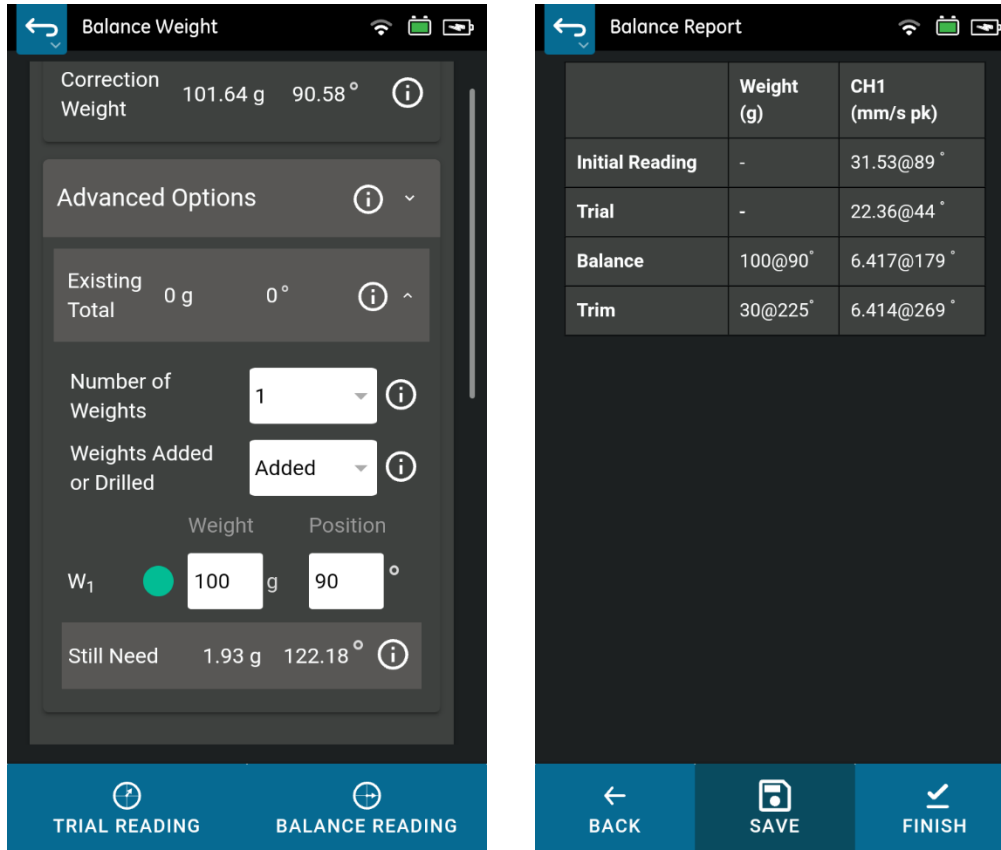

Figure 2-3 Trial Weight and Trial Reading screens

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Balance & Trim - Attach **Balance** weights to the balancing plane as recommended by S1 Collector app. Advanced Options allow you to split weights, and estimate the residual if non-exact weights are fitted. Then take a measurement to confirm the imbalance has been reduced. Any residual imbalance can be removed via additional Trim balance cycles.

Report & Save – View the Balance Report and save as a pdf document.

Figure 2-4 Report & Save

Future releases of SCOUT200 app and System 1 software will include:

1. Dual Plane Balancing
2. Capability to remove/drill weight
3. View Balance Job History
4. Additional Weight Position options like Circumference Arc or Fixed positions
5. Ability to add &/or edit readings manually
6. Import Balance data into System 1 and generate a Balance Report

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ROTOR BALANCING KIT

In addition to the existing SCOUT200 Data Collector kits, an optional Rotor Balancing Kit has been added, comprising:

1. Laser Tachometer
2. Keyphasor/Laser Tachometer cable
3. Reflective Tape
4. Tachometer Magnetic Stand
5. Sensor Extension Cables, 5 meters
6. Balancing Kit Carry Bag

The SCOUT200 datasheet includes the kit part number and details.

All parts can also be ordered separately.

Accessory Kits

Balancing Kit - 161M0958

Part Number	Description	Qty
113M5529-01	Reflective tape One roll, 60 cm	1
LASA0315	Laser Tach Kit Zone 2 rated	1
CBL50216	Laser cable Five meters	1
MAGA0063	Laser magnetic stand	1
159M9583*	Sensor extension cable, 5 m	2
CBBL0026	Carrying case for the kit	1

* Depending on availability, this cable may be substituted with the CB5G0024 and CB5R0025 cables and two 161M2913 adapters.

Zone 2 Laser Tach Kit – LASA0315

Part Number	Description	Qty
108M4064	Laser Tacho Holder	1
108M4066	Circlips - 20Mm Stainless	1
108M4067	Arp115 Oring	2
108M4069	Laser Tach Zone 2 rated	1

Figure 3-1 Balancing Kit in Datasheet

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S1 COLLECTOR APP ON GOOGLE PLAY STORE

The S1 Collector app is now available on the Google Play Store. This is the app which runs on your handheld device and controls the SCOUT200 data collector. Previously it was only available as an .apk file, via either Flexnet licensing or the Bently Nevada Tech Support Portal. Some customer's IT procedures did not allow the "side loading" of .apk files on their managed corporate devices.

Simply open the app store and search for "S1 Collector".

With v21.2, the S1 Collector app is also supported on newer Android 10 and 11 operating systems.

Figure 4-1: S1 Collector app on Google Play Store

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SYSTEM 1 V21.2 ENHANCEMENTS FOR PORTABLES

Several enhancements within the general System 1 v21.2 software release will be of particular benefit to portable users, so are also covered here:

Global Plotsets – Previously, plotsets were applicable to one machine only (or at most to the child machines of a User Template). That was not ideal for portables-users who must analyze hundreds of machines. Now plotsets can be created which are applicable to all machines, so you can consistently view the same types of data for all machines.

This can be accomplished from the Defined Plot Sets, Save Plot sets, and Manage Plot sets dialog boxes by using the "Apply to All Machines" option.

Spectral Band Computation enhancements – The "Spectral Band" type of Trended Variable has been enhanced by splitting into these three distinct options:

- Spectral Bands – Energy: This is the existing variable type, previously known as Spectral Bands. Uses a root mean square (RMS) calculation to sum the contribution from all spectral lines within the band.
- Spectral Bands – Peak: The trended variable is calculated as simply the highest spectral peak within the band. This calculation method is new to System 1, but is valued by some portables users.
- Overall – Spectral: Performs a root mean square (RMS) calculation over all spectral lines, to generate the Spectrum Overall. This was available previously by manually setting a Spectral Band to cover from 0 to Fmax.

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WHEN UPGRADING FROM VERSIONS PRIOR TO 21.2

! Due to the updated Android Secure Storage standard, the S1 Collector app will not automatically retain all collected data during the upgrade to 21.2. We recommend you receive all data in System 1 before the upgrade.

If you require that data to be retained *on the handheld*, you should take a back-up before upgrading and restore it after upgrade, as detailed below. This will *not* be required for future upgrades.

Note that if you are changing from installing via .apk file to Google Playstore, you will need to uninstall the current S1 Collector all first, as explained below.

Installation with data retention on handheld

1. Before installing S1 Collector v21.2, take the backup of database.
    a. On Home Screen, select Settings
    b. Click on Database Options
    c. Select Backup Database
2. Uninstall previous version of S1 Collector **ONLY if source of installation is changed.** E.g., v21.1 was installed from Flexera and now 21.2 is being installed from Google Play Store or vice-versa.
3. Install S1 Collector v21.2
4. Restore Database
    a. On Home Screen, select Settings
    b. Click on Database Options
    c. Select Restore Database
5. See the SCOUT200 User Guide for more details.

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